



# Toshiba 27WL55A Schematic Diagrams



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# SCHEMATIC DIAGRAM

**MODEL : 27WL55A / 27WL55E / 27WL55R / 27WL55T**

**WARNING : BEFORE SERVICING THIS CHASSIS, READ THE "SERVICE SAFETY PRECAUTIONS" ON PAGE 3 OF**

THIS MANUAL.

**CAUTION : The international hazard symbols " " in the schematic diagram and the parts list designate components**

which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before

replacing any of these components, read carefully the SERVICE SAFETY PRECAUTIONS on the

MANUAL for this

model. Do not degrade the safety of the receiver through improper servicing.

**NOTE:**

1. RESISTOR

Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.

1/2R = Metal or Metal oxide of 1/2 watt

1RF = Fuse resistor of 1 watt

K =  $\pm 10\%$

2. CAPACITOR

Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in F, and the values more than 1 in pF.

All capacitors are ceramic 50V, unless otherwise noted as the following marks.

3. The parts indicated with "

4. Voltages read with DIGITAL MULTI-METER from point indicated to chassing ground, using a color bar signal with all

controls at normal, line voltage 220 volts.

5. Waveforms are taken receiving color bar signal with enough sensitivity.

6. Voltage reading shown are nominal values and may vary  $\pm 20\%$  except H.V.

G =  $\pm 2\%$

F =  $\pm 1\%$

Electolytic capacitor

" have special characteristics, and should be replaced with identical parts only.

1/2S = Carbon compstion of 1/2 watt

10W = Cement of 10 watt

Mylar capacitor

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[Monitor Toshiba 65H84 Brochure](#)

65" diagonal hd monitor (2 pages)

[Monitor Toshiba 50HP82 Owner's Manual](#)

Wide plasma display (52 pages)

## Summary of Contents for Toshiba 27WL55A

[Page 1](#) SCHEMATIC DIAGRAM MODEL : 27WL55A / 27WL55E / 27WL55R / 27WL55T WARNING : BEFORE SERVICING THIS CHASSIS, READ THE "SERVICE SAFETY PRECAUTIONS" ON PAGE 3 OF THIS MANUAL. CAUTION : The international hazard symbols " " in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list.

[Page 2](#) SCHEMATIC DIAGRAM STRUCTURE: CONNECTOR .....1/49 AV JACK  
.....2/49 TIF .....3/49 AUDIO\_OUT ..... 4/49  
REGULATOR .....5/49 KEY .....6/49 PC-IN\_BOARD  
.....7/49 LED\_RMT\_HP .....8/49 TEXT\_SW .....9/49

CONNECTOR(POWER\_BOARD) .....10/49 MAIN\_POWER(POWER\_BOARD)  
.....11/49 SUB\_POWER(POWER\_BOARD) .....12/49 AC-INPUT  
..... 13/49 SIGNAL ANALOG IN [SHEET-200] ..

[Page 4](#) 27WL55A/E/R/T CONNECTOR (1/49)

[Page 5](#) 27WL55A/E/R/T AV\_JACK (2/49)

[Page 6](#) SCL1 1-B5,10-B1 LV42 OPEN 1-B2,2-A1,3-C2,8-E1 SDA1 L110 CV42 KETSU OPEN (23103272Q) GV01 CB41 RM73B1HR00OD OPEN RV60 CV39 16V100 1-B6,2-A1,9-A1 V\_TV1 2-B1 GV02 SCL1 OPEN 1-A6 RV43 SDA1 CC04 OPEN QV06 2SA1576A RV44 C104 OPEN AFT1 AFT1 1-C2 50V4.7 27WL55A/E/R/T (3/49)

[Page 7](#) KDS160-RTK/P Q673 OPEN R685 C690 C676 2SA1162-Y R686 KETSU 50V100u A\_MUTE GR661 A\_MUTE VCC\_AUDIO 1-D8,5-A1,5-A2 VCC\_AUDIO R684 C677 100k OPEN C685 B50V0.01 C6990 7L50V0.47 R683 1-D8 R6602 Q662 RN2404(TE85L,F) R6601 EXT\_MUTE Q663 EXT\_MUTE 1-B7 2SC4081-Q R6603 100k 27WL55A/E/R/T AUDIO\_OUT (4/49)

[Page 8](#) POWER\_SW 1-D7 2SC2412K KETSU VCC\_AUDIO RE87 DE95 RE85 RE90 1-D8,4-B1,5-A1 KETSU KETSU KETSU DE91 KETSU QE94A HEAT\_SINK QE94 ZE94 2SD2396/2SC3852 125V 2A QE94B VCC\_AUDIO 26.5V\_AUDIO 4-A2 1-D8,4-B1,5-A2 DE99 RE94 1SS355-TE17 DE97 1/8W270 MTZJ13C DE98 MTZJ13C GND\_AUDIO 27WL55A/E/R/T REGULATOR (5/49)

[Page 9](#) PJ42A PLUG\_2mm\_6P\_L\S6B-PH-K-S DA06 RA74 RA71 RA72 RA73 UdzSTE176.8B CHIP JP RA78 RA77 CHIP JP RA79 CHIP JP 27WL55A/E/R/T (6/49)

[Page 10](#) OPEN R501 GJ16 R511 6.8k SHORT OPEN PV90 KRd-8622 GR34 PC-DSUB GR35 SHORT SHORT DR01 OPEN RR01 RR04 1/8W75 RR02 DR02 RR05 1/8W75 OPEN DR03 OPEN RR03 RR06 1/8W75 P902A B5B-PH-K-S DR04 DR05 OPEN OPEN P900A B9B-PH-K-S 27WL55A/E/R/T PC-IN\_BOARD (7/49)

[Page 11](#) RMT\_FGND SPK-R PJ41A PLUG\_2mm\_11P\B11B-PH-K-S QB04 2SC2712Y CB01 CB38 ON\_TIMER P601 7L10V220u 25V0.1 PLUG\_2.5mm\_4P\B4B-EH-F1A (GREEN) DB04 SCL-003MC3FXHJK RB24 CHIP\_JP RB22 OPEN RB09 GP1UE281RK0F DB23 1SS355-TE17 RB08 Vout DB22 1SS355-TE17 CB03 CB02 DB20 25V0.1 7L10V220u UDZS TE-17 5.6B 27WL55A/E/R/T LED\_RMT\_HP (8/49)

[Page 12](#) 27WL55A/E/R/T TEXT\_SW (9/49)

[Page 13](#) TLN3481GH 35V56uF BL\_VCC P812B PLUG\_3.96mm\_5P\B5P-VH BL\_VCC STARTUP\_SUB 3-D2 STARTUP\_SUB BL\_VCC STARTUP\_SUB RECTIFIED(-)\_SUB 3-D2 RECTIFIED(-)\_SUB BL\_VCC RECTIFIED(-)\SUB VCC\_LCD 2-D8 VCC\_LCD BL\_VCC RECTIFIED(+) SUB 3-D2 RECTIFIED(+)\_SUB BL\_GND RECTIFIED(+)\SUB BL\_GND BL\_GND BL\_GND BL\_GND P805 B10B-PH-K-S PJ62A P813B P803A OPEN PLUG\_2mm\_12P\B12B-PH-K-S B4B-PH-K-S 27WL55A/E/R/T CONNECTOR(POWER\_BOARD) (10/49)

[Page 14](#) CE55 TLP421F(GR)/PS2581L1(D) RE82 35V56uF 1-A1 R873 POWER\_LCD RE59 1/6P1.5k 330k C813 63V0.33 QE64 Q883 BD4746G SE024N AC\_DETECT 1-A1,1-B2 RE58 RE61 R816 22k\_F 18k\_F R874 RE56 RE60 SHORT 1.5k\_F LIVE\_AREA C890 63V0.33 RE57 1.5k\_F R890 CE53 B25V220n\_K 27WL55A/E/R/T MAIN\_POWER(POWER\_BOARD) (11/49)

[Page 15](#) B560p 50V0.1 OPEN RE42 RE45 OPEN RE41 1.5k RE43 RE44 10k\_F QE83 POWER\_DB 1-A2 CE24 NJM431L QE53 50V0.1u RN1403 RE12 RE46 1/2R220 1.8k\_F DE06 FR105-FL RE18 RE29 RK993DR22J OPEN CE21 OPEN CE16 35V56uF CE11 OPEN LIVE\_AREA 27WL55A/E/R/T SUB\_POWER(POWER\_BOARD) (12/49)

[Page 16](#) 2SC2412K R859 R857 T801Z C852 B1000p R858 C851 10V1u T801 TRF3253AH R801 VR37 225J R899 RN14A1A825J D899 TNR15G471K P805B C801 AC275V0.22u F801A FUSE HOLDER NEUTRAL LINE F801B FUSE HOLDER F801 T6.3A L/250V P800 LIVE\_AREA 27WL55A/E/R/T Lock 2P\_11.88mm\_S AC\_INPUT (13/49)

[Page 17](#) 27WL55A/E/R/T SIGNAL ANALOG IN (14/49)

[Page 18](#) 27WL55A/E/R/T SIGNAL D IN A (15/49)

[Page 19](#) 27WL55A/E/R/T SIGNAL D IN B (16/49)

[Page 20](#) 27WL55A/E/R/T SIGNAL HDMI (Link,I2C) (17/49)

[Page 21](#) 27WL55A/E/R/T SIGNAL HDMI Rx#2 (Video/Audio) (18/49)

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[Page 27](#) 27WL55A/E/R/T SIGNAL EEPROM1 (24/49)

[Page 28](#) 27WL55A/E/R/T SIGNAL EEPROM2 (25/49)

[Page 29](#) Note: For POWER\_DB\_O (L: ON) line When power is ON, GATE is closed until turn ON DB. During POD STBY mode, it keeping ON, but shut-off circuit includes into DB. 27WL55A/E/R/T SIGNAL MICRO I/O (26/49)

[Page 30](#) 402:3A;409:1B 27WL55A/E/R/T SIGNAL OCM MEMORY I/F (27/49)

[Page 31](#) 401:1A;409:1B 27WL55A/E/R/T SIGNAL FLASH MEMORY (28/49)

[Page 32](#) 27WL55A/E/R/T SIGNAL SYNC SEPA (29/49)

[Page 33](#) 27WL55A/E/R/T SIGNAL E2P OTHER (30/49)

[Page 34](#) Note: For I2C Bus lines (SDA\_STBY, SCL\_STBY) : Normally, connecting to Cortez, When POD STBY mode, these are connected to DB. 27WL55A/E/R/T SIGNAL STD-BY MICRO (31/49)

[Page 35](#) 27WL55A/E/R/T SIGNAL CORTEZ REG 1 (32/49)

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[Page 38](#) 27WL55A/E/R/T SIGNAL BOOT CONFIG (35/49)

[Page 39](#) 27WL55A/E/R/T SIGNAL SERVICE CONNECTOR (36/49)

[Page 40](#) \*I2C Bus Switching of Stand-By Micom SW1: H at 8V Line (Normally) ; Connect to Cortez SW2: L at 8V Line (POD STBY state) ; Connect to DB side 27WL55A/E/R/T SIGNAL I2C Switch (37/49)

[Page 41](#) 27WL55A/E/R/T SIGNAL AUDIO (1/2) (38/49)

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[Page 51](#) 27WL55A/E/R/T SIGNAL Power Connector and Dimming (48/49)

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This manual is also suitable for:

[27wl55e27wl55r27wl55t](#)